Mercury Light Source Range

Models covered by this manual:

UFO MER3000M
UFO MER3000DMX
UFO MER3000 0-10V

Covers both 3000K and 2700K colour temperature variants.

Please read this manual fully before installing, operating or performing maintenance on the light source unit.

INTRODUCTION

Thank you for purchasing this UFO Light source.

Please read these instructions fully before connecting your unit to the electrical supply, and keep them for future reference.

The UFO Mercury range of light sources are suitable for use with either glass or polymer fibre-optic harness

The Mercury is powered by a 100-240 VAC remote desktop power supply unit.

IMPORTANT

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

INSTALLATION INSTRUCTIONS

POWER SUPPLY REQUIREMENTS

The LED Light Source is powered from a multifunction, multi-voltage, desk top Power Supply Unit. Remove the 36V Desk Top PSU from its box. This PSU is an IEC input device catering for UK, European and USA mains supplies using the relevant power cord.

MER3000M

MER3000DMX

CONNECTION – MER3000M

There are 2 connections required – the fibre port and the mains supply cable. The fibre port should be connected first. Connect and secure the fibre optic connector into the green collar and secure using the M5 locking screw.

Connect the IEC power cord into the Desk Top PSU and plug the mains plug into the electrical supply socket. Switch on power the led Indicator will illuminate and the light source is ready for use. If no light is produced consult the TROUBLESHOOTING section.

NOTE: THESE LIGHT SOURCES ARE NOT MAINS DIMMABLE

NORMAL OPERATION – MER3000

Under normal operation the MER3000 Light Source can be dimmed manually using the dimmer control on the rear of the unit.
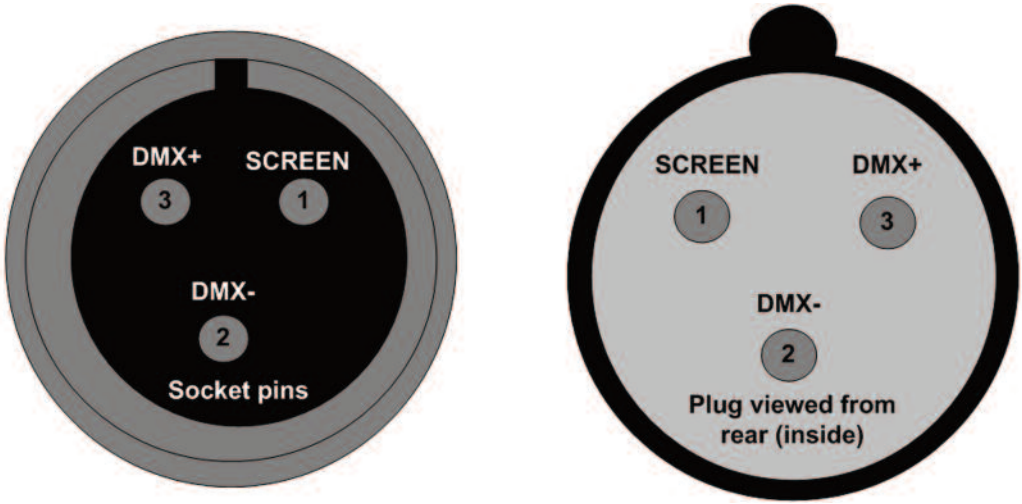
CONNECTION – MER3000DMX

There are 3 connections required – the fibre port, the mains supply cable and the DMX control cable. The fibre port should be connected first. Connect and secure the fibre optic connector into the green collar and secure using the M5 locking screw.

Connect the IEC power cord into the Desk Top PSU and plug the mains plug into the electrical supply socket. Switch on power the led Indicator will illuminate and the light source is ready for use. If no light is produced consult the TROUBLESHOOTING section.

NOTE: THESE LIGHT SOURCES ARE NOT MAINS DIMMABLE

Connect up the DMX control cables to the Mini-XLR sockets on the rear of the Light Source. The recommended plug for these sockets is Multicomp SVP556-TA. The pin out details for the plugs are shown below.

CONNECTION MER3000 0-10V

There are three connections required - the fibre port, the mains supply cable and the 0-10V control cable. The fibre port should be connected first. Connect and secure the fibre optic connector into the green collar and secure using the M5 locking screw.

Connect the IEC power cord into the Desk Top PSU and plug the mains plug into the electrical supply socket. Switch on power the led Indicator will illuminate and the light source is ready for use. If no light is produced consult the TROUBLESHOOTING section.

NOTE: THESE LIGHT SOURCES ARE NOT MAINS DIMMABLE

Connect up the 0-10V control cable to the mini XLR sockets on the rear of the light source. The recommended plug for these sockets is the Multicomp SVP556-TA. The pin out details for these plugs are shown below.
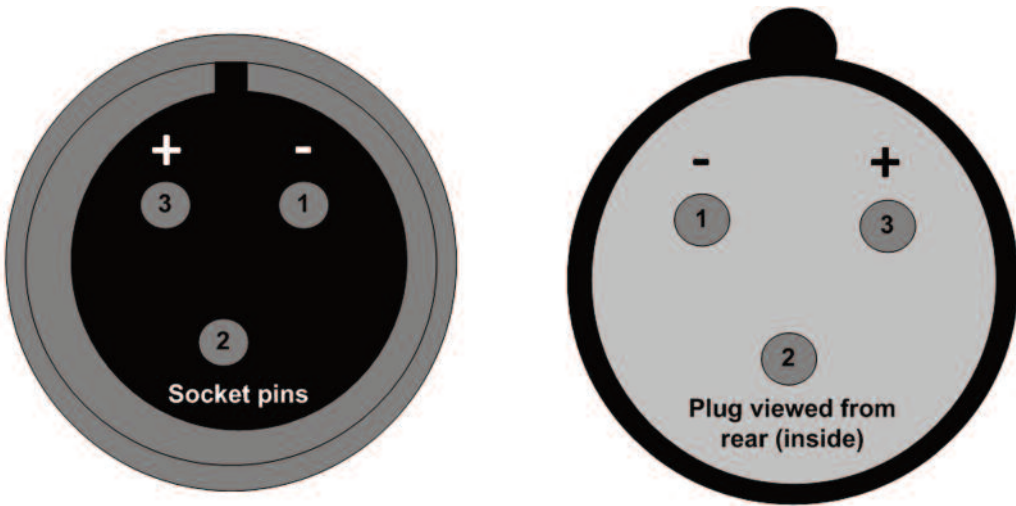
0-10V SETTINGS

The following table represents light output percentage against approximate control value input.

Light Output Percentage	Voltage
100%	7 - 10V
90%	6.2V
80%	5.8V
70%	5.4V
60%	5V
50%	4.5V
40%	3.9V
30%	3.2V
20%	2.3V
10%	1.4V
5%	1.1V
2.5%	0.8V
1.25%	0.4V
0%	0.2V

Note:

The light source will not illuminate unless a 0-10V control voltage is present.

DMX OPERATION

The DMX Light Sources can be dimmed remotely (single Channel 0-255 – SEE TABLE BELOW) and can be addressed (by UFO at the factory) from 001 to 512.

Single Channel Value	0	255
Description	LED Off	LED Brightest

Unless the address is specified on the Purchase Order, all Light Sources will be defaulted to Address 001. Connect the DMX controller to either of the Mini XLR sockets, and the Light Source can now be dimmed. Additional Slave (same address) DMX Light Sources can be linked together.

To revert to Non DMX control operation, remove the DMX controller connection or switch the DMX controller OFF and the Light Source will default to full light output. There is no manual dimming control on the MER3000DMX

SETTING THE DMX ADDRESS

Disconnect the light source from the mains supply. Loosen the six screws and remove the top cover of the unit, taking care to lift outwards the section around the square fan vent.
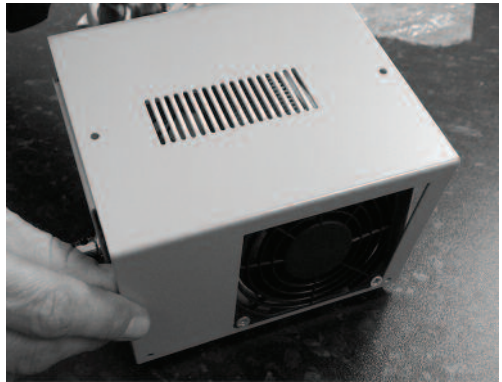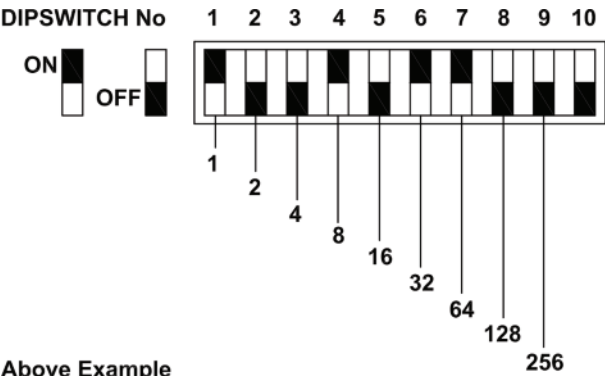

The DMX address can be manually set using the 10 way DIP switch inside the unit as shown below.

SETTING THE DMX ADDRESS

DMX B START Channel #	DIP Switches On	DMX B START Channel #	DIP Switches On
1	1	11	1,2,4
2	2	12	3,4
3	1,2	13	1,3,4
4	3	14	2,3,4
5	1,3	15	1,2,3,4
6	2,3	16	5
7	1,2,3	:	
8	4	:	
9	1,4	:	
10	2,4	511	1,2,3,4,5,6,7,8,9

DIPSWITCH No 1 2 3 4 5 6 7 8 9 10

ON
OFF

1
2
4
8
16
32
64
128
256

Above Example

1 - ON   6 - ON
2 - OFF   7 - ON
3 - OFF   8 - OFF   = ADDRESS 105
4 - ON   9 - OFF
5 - OFF   10 - OFF

MAINTENANCE

Please Note that a record of all maintenance MUST be kept in the table below, indicating what maintenance was undertaken and when

Date	Maintenance Undertaken

TROUBLESHOOTING

Problem	Probable Causes	Remedy
Unit is dead – no light output and LED power indicator on PSU is not illuminated	Mains supply off	Check supply & reinstate
	Loose mains plugs	Check plugs
	Plug fuse blown (UK)	Check fuse. If blown, replace
	PSU failed	Replace PSU
Unit is dead – no light output and LED power indicator on PSU is illuminated, but LED indicator on Light Source not illuminated	PSU failed	Replace PSU
Unit is dead – no light output but LED power indicator is illuminated	DMX dimming at minimum (for DMX version only)	Adjust brightness on controller (increase value up from 0)
	DMX fault on controller or DMX cable	Remove DMX XLR plug from rear of light source. Light source wil default to full bright. Repair DMX controller or cabling.
	LED Array failure	Replace Light Source
Unit not responding to DMX commands	Address incorrect	Check the address set on unit matches the address set on the controller
	DMX cable fault	Refer to manual diagram for correct wiring termination. Carry out continuity check
		Swap DMX cable for known good cable

ADDITIONAL TROUBLESHOOTING (0-10V MODELS ONLY)

Problem	Probable Causes	Remedy
Unit not repsonding to 0-10V commands	0-10V cable fault	Refer to manual diagram for correct termination. Carry out continuity check. Carry out voltage / polarity check
	Controller fault	Carry out voltage / polarity check at controller. Repair / replace as necessary
	0-10V LED PCB failure	Replace 0-10V PCB
No 0-10V signal present	Controller off or failed	Check controller. Ensure 0-10V signal present
	0-10V cable faulty	Carry out voltage and polarity check on mini XLR plug. Repair as necessary

TECHNICAL SPECIFICATIONS

Description	Details
Port connector size	30mm Diameter
Fibre type	Glass/Polymer
Mains Supply Voltage	100-240V AC, 50-60 Hz.1.8A
PSU Output	36V DC, 1.66A, 60W Maximum
LED Power	44W
Power Connection	2.1 x 5.5 x 12mm
Min Ambient Temperature	-10ºC
Max Ambient Temperature	+45ºC
Fan	80mm 12V Crossflow
Thermal Protection	Thermal Cut Out switch 70°C
LED Type / Model	White light
DMX	User Addressable 1 channel dimming (0-255)
0-10V Control	0-10V DC Receiving
LED Life	50,000 hours in ambient 25ºC
Equivalent TH Light Output	90W
CRI	>90
Colour Temperature ºK	3050ºK or 2700ºK
Material	Aluminium
Colour	Silver
Size	140mm (L) x 137mm (W) x 90mm (H)